

1 6 JUN 1983

Dear Light-Duty Vehicle Manufacturer:
CD-83-9 (LD)

Subject: General Label and Corporate Average Fuel Economy Data
Processing Changes

This letter transmits to you information about the recent changes to EPA's General Label and Corporate Average Fuel Economy (CAFE) computer systems. It also requests you to provide some currently submitted information in a specific computer compatible format. These changes are being adopted to speed our response to manufacturers' requests for fuel economy label and CAFE approvals. They will also facilitate establishing a publicly accessible data base of approved and released fuel economy label information.

A. General Label Fuel Economy

EPA has made changes beginning with the 1984 model year computer programs to provide a more informational and faster response to the manufacturer when requesting fuel economy labels on basic engine indexes. These program changes will also maintain data bases which can be accessed directly by the manufacturer with accounts on the University of Michigan MTS computer system. These changes include the addition of a new data input field on Card 1 of the General Label Fuel Economy Data Sheet, in columns 42-47, titled "Release Date." The release date is the date the manufacturer expects the information published in the Guide and Test Car List to become public knowledge. This date will be used to identify to other computer programs in the system whether the data should be placed in publicly accessible data bases. The data bases being made available contain only the Guide and Test Car List information which has been released. Assignment of a release date will first be attempted by use of the release date from the Card 1 input data. If the release date is not entered or is not logically legitimate according to internal computer checks performed, the date which will be used to release the data will be the date of EPA's label value approval transmittal letter plus five (5) working days. The five working days are expected to give the manufacturer enough time to review the label reports for accuracy (including the accuracy of the release date) and

respond back to the certification team. If corrections are required to the data supporting the label, the release of information for the basic engine index will be prevented and the process will start over again.

The modified input data sheet is provided in Enclosure I. The computer program to be used by the manufacturer to access the Guide and Test Car List data bases is described in Enclosure II.

B. Corporate Average Fuel Economy

A new input data sheet has been developed which would input the total sales for each compliance category level within the CAFE. This data sheet would need to be submitted only one time for each year along with the CAFE data now submitted to EPA. The total sales would allow checks to be performed within the CAFE computer system to determine whether the compliance category is complete. This data sheet is Enclosure III.

Sincerely yours,

Robert E. Maxwell, Director
Certification Division
Office of Mobile Sources

Enclosures

ENCLOSURE I STORED AS CD8309_1.PCX

ENCLOSURE II

MANUFACTURER GUIDE/TEST CAR LIST REPORT GENERATOR
1236C-MFRRPT USER MANUAL

1. OPERATING SYSTEM: University of Michigan Terminal System (MTS).
2. PURPOSE: To provide information on the Gas Mileage Guide and Test Car List (vehicle and test results information) accessible directly by manufacturers with accounts on MTS. Reports can be produced for the Fuel Economy Guide and Test Car List. Reports can be restricted to one manufacturer or all manufacturers, by car line name, by Basic Engine Index number, and on or after a specified release date.
3. RUN PROCEDURE: This program can be run by the following command:

\$SOURCE SAQM:1236C-MFRRPT

4. DESCRIPTION: The following illustrates a sample run of the program for both Fuel Economy Guide and Test Car List information:

NOTE: All actual prompts and data produced by the program are in upper case print. Comments and explanations appear in lower case print.

NOTE: A Control-C (End of File) in response to most prompts will cause processing of that particular report specification to be discontinued.

NOTE: Reports will not include data with a release date later than today's date.

A. Sequence for Guide reports:

*** INTERACTIVE FUEL ECONOMY GUIDE AND TEST CAR LIST PROGRAM ***

ENTER A VALUE 1-4 TO SELECT THE REPORT YOU WANT.

- 1 --FUEL ECONOMY GUIDE WITH REPORT HEADERS
- 2 --TEST CAR LIST WITH REPORT HEADERS
- 3 --FUEL ECONOMY GUIDE WITHOUT REPORT HEADERS
- 4 --TEST CAR LIST WITHOUT REPORT HEADERS

This prompt gives the report options for this program. An entry of 1 or 3 will produce a Fuel Economy Guide report with or without headings.

08:16:12

1

06/09/83

ENTER MODEL YEAR (LAST TWO DIGITS)
OR <CONTROL-C> TO CANCEL THE REQUEST

USER MANUAL

I The model year entered should be greater than or equal to 84.
Data is currently only available for 1984 model year vehicles.

ENTER STATE CODE:
C --CALIFORNIA
F --49-STATE FEDERAL
OR <CONTROL-C> TO CANCEL THE REQUEST

The Test Car List is divided into two state codes, California
and Federal (49-State). If both state codes are desired, two
separate reports must be generated.

SPECIFY UP TO TEN CAR LINE CLASS CODES:
00-19 --CAR LINE CLASS CODE
ALL --ALL CLASSES
LIST --TO PRINT AN EXPLANATION OF CLASS CODES
OR <CONTROL-C> TO CANCEL THE REQUEST

LIST

I The "LIST" option provides an explanation of car line class |
codes:

CAR LINE CLASS CODES:

	10 --SMALL PICKUP TRUCKS/2WD
01 --TWO SEATERS	11 --SMALL PICKUP TRUCKS/4WD
02 --MINICOMPACT CARS	12 --STANDARD PICKUP TRUCKS/2WD
03 --SUBCOMPACT CARS	13 --STANDARD PICKUP TRUCKS/4WD
04 --COMPACT CARS	14 --VANS, CARGO
05 --MID-SIZE CARS	15 --VANS, PASSENGER
06 --LARGE CARS	
07 --SMALL STATION WAGONS	17 --SPECIAL PURPOSE VEHICLES/2WD
08 --MID-SIZE STATION WAGONS	18 --SPECIAL PURPOSE VEHICLES/4WD
09 --LARGE STATION WAGONS	19 --SPECIAL PURPOSE VEHICLES/CAB

08:16:12
06/09/83

2

MANUFACTURER GUIDE/TEST CAR LIST REPORT GENERATOR
1236C-MFRRPT USER MANUAL

After carline class codes are listed, the prompt will be I
I repeated and the user can enter a specification: |

SPECIFY UP TO TEN CAR LINE CLASS CODES:
00-19 --CAR LINE CLASS CODE
ALL --ALL CLASSES
LIST --TO PRINT AN EXPLANATION OF CLASS CODES
OR <CONTROL-C> TO CANCEL THE REQUEST

-- -- -----

1 2 7 03

Car line class codes must be entered directly under the
dashes, and may be entered in any order. Single digit codes
must be right justified if a leading zero is not entered. If
all car line class codes are desired, "ALL" should be entered
at the beginning of the line.

SPECIFY THE MANUFACTURER TO BE REPORTED:
000 -999 --VEHICLE INFORMATION MANUFACTURER CODE
ALL --ALL MANUFACTURERS (THIS MAY BE EXPENSIVE)
OR <CONTROL-C> TO CANCEL THE REQUEST

The desired manufacturer code should be entered. Manufacturer '
codes are available on the back of the Vehicle Information Data
Sheet. If a complete report of all manufacturers is desired,
"ALL" should be entered (Due to the amount of data, this option

may be costly to run.)

SPECIFY THE CAR LINE NAME:

UP TO 28 CHARACTERS OF THE CAR LINE NAME

ALL --ALL CAR LINES

OR <CONTROL-C> TO CANCEL THE REQUEST

SCORPION

If a specific car line is desired, that car line name should be entered; otherwise, "ALL" will produce a report of all car lines.

The user may enter up to 28 leading characters of the car line name. The program will print reports for all car lines that have car line names beginning with the characters entered. For example, imagine that a manufacturer has four car lines named Campania, Canard, Cannes, and Enigma. The user can request reports for all car lines beginning with the letter "C" by

08:16:12
06/09/83

simply entering "C" (or "CA") as the car line name. The program will then print reports for the first three car lines. To obtain reports for Canard and Cannes, "CAN" can be entered, since both car line names begin with "CAN". To obtain reports for Canard only, enter "CANARD". To obtain reports for all four car lines, "ALL" should be entered.

ENTER A VALUE 1-3 TO REPORT ALL MODELS
1 --WITH A BASIC ENGINE INDEX
2 --ON OR AFTER A SPECIFIED RELEASE DATE
3 --WITH THE SPECIFIED CAR LINE NAME
OR <CONTROL-C> TO CANCEL THE REQUEST

The above prompt gives the user 3 options to further restrict the range of the report. The user should enter "1" if the user only wants a report for a single basic engine index. The program will then print:

SPECIFY THE BASIC ENGINE INDEX:
00000 -99999 --FIVE DIGIT BASIC ENGINE INDEX
OR <CONTROL-C> TO CANCEL THE REQUEST

12345

The 5-digit Basic Engine Index entered restricts the report to vehicle models with that index.

The user should enter "2" to produce a report for all models on or after a specified release date. The program will then ask the user to enter the release date:

SPECIFY RELEASE DATE:
OR <CONTROL-C> TO CANCEL THE REQUEST
MM-DD-YY

- - - - -

01 01 84

The release date should be entered as shown --two digits each for month, day and year entered under the dashes; otherwise an error message will be printed and the prompt will be repeated. Data will not be available for release dates later than today's date.

If the user wants reports for all models within a carline, manufacturer, and carline class, "3" should be entered. No further specifications are required for option "3". Once all entries are complete, the program will ask the user to verify

08:16:12

4

06/09/83

I the report specifications:

YOUR REPORT SPECIFICATIONS ARE:

1. MODEL YEAR: 84
2. STATE CODE: F
3. CAR LINE CLASS CODES:
1 2 3 7
4. MANUFACTURER CODE: 997
5. CAR LINE NAME: SCORPION
6. ALL MODELS FOR BASIC ENGINE INDEX 12345

PLEASE CONFIRM THE REPORT SPECIFICATIONS BY ENTERING:

1-6 --ITEM NUMBER TO BE CORRECTED
<RETURN> IF ALL OPTIONS ARE CORRECT
<CONTROL-C> TO TERMINATE THIS SPECIFICATION

-(A <RETURN> was entered.)

If the report specification should be changed, the user should enter the number of the item to be corrected. The program will prompt the user for a new entry and then give the user another opportunity to verify the corrected specification. Correction and verification will continue until the user enters <RETURN> or <CONTROL-C>. (See the sample session in this manual.)

After verification of the specifications (entry of a <RETURN>), the program will prepare, but not print, the result reports. Reports are accumulated in temporary internal. Once the reports have been prepared, the following message will be displayed.

YOU WISH TO PROCESS ANOTHER SET OF REPORTS (Y/N)?

If "N" (no) is entered, no more report specifications will be processed and report printing will begin. If "Y" (yes) is entered, the program will start over again at the beginning and let the user specify another set of reports. The program accumulates results until all specifications are completed.

08:16:12

5

06/09/83

B. Sequence for Test Car List reports:

*** INTERACTIVE FUEL ECONOMY GUIDE AND TEST CAR LIST PROGRAM ***

ENTER A VALUE 1-4 TO SELECT THE REPORT YOU WANT.

- 1 --FUEL ECONOMY GUIDE WITH REPORT HEADERS
- 2 --TEST CAR LIST WITH REPORT HEADERS
- 3 --FUEL ECONOMY GUIDE WITHOUT REPORT HEADERS
- 4 --TEST CAR LIST WITHOUT REPORT HEADERS

This prompt gives the report options for this program. An entry of 2 or 4 will produce a Test Car List report with or without headings.

ENTER MODEL YEAR (LAST TWO DIGITS)
OR <CONTROL-C> TO CANCEL THE REQUEST

84

The model year entered should be greater than or equal to 84.
I Data is currently only available for 1984 model year vehicles.

ENTER ONE TO FOUR SALES CLASS CODES:

- CT --CALIFORNIA TRUCK
- CV --CALIFORNIA VEHICLE
- FT --FEDERAL TRUCK
- FV --FEDERAL VEHICLE
- ALL --ALL VEHICLES AND TRUCKS
- OR <CONTROL-C> TO CANCEL THE REQUEST

FT CT

| If "ALL" is entered, all of the Sales Class Codes will be |
| included in the report.

SPECIFY THE MANUFACTURER TO BE REPORTED:
000 -999 --VEHICLE INFORMATION MANUFACTURER CODE

ALL --ALL MANUFACTURERS (THIS MAY BE EXPENSIVE)
OR <CONTROL-C> TO CANCEL THE REQUEST

ALL

I The desired manufacturer code should be entered. Manufacturer I
codes are available on the back of the Vehicle Information Data |

08:16:12
06/09/83

Sheet. If a complete report of all manufacturers is desired, "ALL" should be entered (Due to the amount of data, this option may be costly to run.)

SPECIFY THE CAR LINE NAME:
UP TO 28 CHARACTERS OF THE CAR LINE NAME
ALL --ALL CAR LINES
OR <CONTROL-C> TO CANCEL THE REQUEST

ALL

If a specific car line is desired, that car line name should be entered; otherwise, "ALL" will produce a report of all car lines.

The user may enter up to 28 leading characters of the car line name. The program will print reports for all car lines that have car line names beginning with the characters entered. For example, imagine that a manufacturer has four car lines named Campania, Canard, Cannes, and Enigma. The user can request reports for all car lines beginning with the letter "C" by simply entering "C" (or "CA") as the car line name. The program will then print reports for the first three car lines. To obtain reports for Canard and Cannes, "CAN" can be entered, since both car line names begin with "CAN". To obtain reports for Canard only, enter "CANARD". To obtain reports for all four car lines, "ALL" should be entered.

ENTER A VALUE 1-3 TO REPORT ALL MODELS
1 --WITH A BASIC ENGINE INDEX
2 --ON OR AFTER A SPECIFIED RELEASE DATE
3 --WITH THE SPECIFIED CAR LINE NAME
OR <CONTROL-C> TO CANCEL THE REQUEST
-
1

The above prompt gives the user 3 options to further restrict the range of the report. The user should enter "1" if the user only wants a report for a single basic engine index. The program will then print:

```
SPECIFY THE BASIC ENGINE INDEX:
00000 -99999 --FIVE DIGIT BASIC ENGINE INDEX
OR <CONTROL-C> TO CANCEL THE REQUEST
-----
12345
```

The 5-digit Basic Engine Index entered restricts the report

08:16:12
06/09/83

I to vehicle models with that index.

The user should enter "2" to produce a report for all models on or after a specified release date. The program will then ask the user to enter the release date:

SPECIFY RELEASE DATE:
OR <CONTROL-C> TO CANCEL THE REQUEST
MM-DD-YY

01 01 84

The release date should be entered as shown --two digits each for month, day and year entered under the dashes; otherwise an error message will be printed and the prompt will be repeated. Data will not be available for release dates later than today's date.

If the user wants reports for all models within a carline, manufacturer, and sales class, "3" should be entered. No further specifications are required for option "3". Once all entries are complete, the program will ask the user to verify the report specifications:

YOUR REPORT SPECIFICATIONS ARE

1. MODEL YEAR: 84
2. SALES CLASS: FT CT
3. MANUFACTURER CODE: ALL
4. CAR LINE NAME: ALL
5. CAR LINE MODELS: ALL

PLEASE CONFIRM THE REPORT SPECIFICATIONS BY ENTERING
1-5 --ITEM NUMBER TO BE CORRECTED
<RETURN> IF ALL OPTIONS ARE CORRECT
<CONTROL-C> TO TERMINATE THIS SPECIFICATION
-

<----- (A <RETURN> was entered.)

If the report specification should be changed, the user should enter the number of the item to be corrected. The program will prompt the user for a new entry and then provide an opportunity to verify the corrected specification. Correction and verification will continue until the user enters <RETURN> or <CONTROL-C>. (See sample session in this manual.)

After verification of the specifications (entry of a <RETURN>), the program will prepare, but not print, the result reports. Reports are accumulated in temporary internal files. Once the reports have been prepared, the following message will be

08:16:12
06/09/83

I displayed.

DO YOU WISH TO PROCESS ANOTHER SET OF REPORTS (Y/N)?

Y

If "N" (no) is entered, no more report specifications will be processed and report printing will begin. If "Y" (yes) is entered, the program will start over again at the beginning and let the user specify another set of reports. The program accumulates results until all specifications are completed.

C. Report Printing Destination. When the user indicates that no more reports are to be processed, the user will be asked to specify where result reports are to be printed. Reports may be printed on four different files or devices:

ENTER UP TO FOUR VALUES TO INDICATE WHERE RESULT REPORTS ARE TO BE PRINTED:

1 --WRITE THE REPORT ON THE TERMINAL
2 --WRITE THE REPORT TO THE END OF TEMPORARY FILE FILE -REPORT.
3 --WRITE THE REPORT TO THE END OF PERMANENT FILE 1236R-4REPT
4 --WRITE THE REPORT ON THE REMOTE PRINTER
OR <CONTROL-C> TO CANCEL PROCESSING

1 4

NOTE: If option "3" is chosen, insure that the permanent file "1236R-4REPT" already exists on the user's MTS account; otherwise an error will occur.

NOTE: If option "4" is chosen, users should be aware that remote printer output will be routed to a default remote printer, unless the remote printer is explicitly reassigned. For manufacturers, the default remote printer is usually the printer at the University of Michigan Computing Center (CNTR).

For further information on reassigning remote printers, see MTS Volume #1, or for a brief description, see the MTS section in this User's Manual.

NOTE: If option "4" is chosen, the user should be aware that *PRINT* is not released by this program. This gives the user an opportunity to redirect output to a different remote printer. For further explanation, see the MTS section in this User's Manual.

5. ERROR MESSAGES: The error messages in this section will closely follow the same order as Section 3.

NOTE: When an error message is printed, it will be followed by the prompt in which the input error occurred (unless otherwise indicated).

A. Report Specification Prompt:

```
*** INVALID REPORT SPECIFICATION ***  
YOU MUST ENTER A VALUE '1'-'4' OR <CONTROL-C>
```

| This message is printed if an out-of-range value or an |
I alphabetic character was entered.

B. Model Year Prompt:

```
*** INVALID MODEL YEAR VALUE ***  
YOU MUST ENTER A VALUE IN THE RANGE 84 -xx
```

This message is printed if an out-of-range or alphabetic character is entered for the model year. The range displayed is the actual range for which data is available.

C. Sales Class Code:

```
*** SALES CLASS CODE '<value>' IS INVALID  
YOU MUST ENTER VALUES 'CT', 'CV', 'FT', 'FV', OR 'ALL'.
```

I This message is printed if a sales class code is entered other |
than 'ALL' or one of the four indicated.

```
*** YOU MUST ENTER AT LEAST ONE SALES CLASS CODE VALUE
```

I This message is printed if no sales class code is entered.

D. Car Line Class Codes:

*** CAR LINE CLASS CODE '<value>' IS INVALID
YOU MUST ENTER VALUES '00'-'19', 'ALL' OR 'LIST'.
NUMERIC VALUES MUST BE RIGHT JUSTIFIED

I This message is printed if a numeric value is out of range or

08:16:12

10

06/09/83

not right justified or if the user enters a character value
| other than 'ALL' or 'LIST'.

*** YOU MUST ENTER AT LEAST ONE CAR LINE CLASS CODE VALUE

| This message is printed if no entry at all is made.

E. Manufacturer Code:

*** INVALID MANUFACTURER CODE ***
YOU MUST ENTER A VALUE '000'-'999' OR 'ALL'.

This message is printed if a numeric value is out of range or
not right justified or if the user enters a character value
other than 'ALL'.

*** END-OF-FILE READING MANUFACTURER CODES FILE ***
THE MANUFACTURER CODE YOU HAVE ENTERED: <value> IS NOT CURRENTLY
SUPPORTED BY THIS SYSTEM. IF YOU BELIEVE YOUR ENTRY IS CORRECT,
NOTIFY EPA COMPUTER OPERATIONS. OTHERWISE, YOU SHOULD EITHER CORRECT
YOUR ENTRY, PROCESS A DIFFERENT MANUFACTURER, OR TERMINATE EXECUTION.

I This message is printed if the manufacturer code entered is
not on file in the EPA data base.

*** I/O ERROR READING MANUFACTURER CODES FILE ***
NOTIFY EPA COMPUTER OPERATIONS

This message indicates that an error exists in one of EPA's
data files. If this error occurs, please notify EPA Computer
Operations personnel of the error message and describe the
report specifications leading up to the error message.

All Models Options Prompt:

*** INVALID OPTION CODE ***
YOU MUST ENTER A VALUE '1', '2', OR '3'.

I This message is printed if an out-of-range or alphabetic

character is entered.

08:16:12

11

06/09/83

G. Basic Engine Index:

*** INVALID BASIC ENGINE INDEX ***
YOU MUST ENTER A VALUE '00000'-'99999'.

This message is printed if an out-of-range or alphabetic I character is entered.

H. Release Date:

*** INVALID NUMERIC ENTRY FOR DATE, MONTH, OR YEAR ***
YOU MUST ENTER VALUES '01'-'12' FOR MONTH, '01'-'31' FOR DAY,
AND '84'-'99' FOR YEAR.

I This message is printed if a nonnumeric character is entered for month, day or year.

***INVALID MONTH SPECIFICATION ***
MONTH MUST HAVE VALUE '01'-'12'.

***INVALID DAY SPECIFICATION ***
DAY MUST HAVE VALUE '01'-'xx'.

***INVALID YEAR SPECIFICATION ***
YEAR MUST HAVE VALUE '84'-'99'.

These messages are printed if entered values are out of range. Note that the range for day specifications corresponds to the actual number of days in the entered month.

Report Specifications Verification:

*** INVALID CONFIRMATION ***
YOU MUST ENTER A VALUE '1'-'6', <RETURN>, OR <CONTROL-C>.

*** INVALID CONFIRMATION ***
YOU MUST ENTER A VALUE '1'-'5', <RETURN>, OR <CONTROL-C>.

One of these error messages is printed (depending on the type

of report, Guide or Test Car List), if an out-of-range or an alphabetic character is entered when the user verifies their report specification.

08:16:12

12

06/09/83

J. Invalid or inaccurate report specifications:

*** NO DATA ON FILE FOR YOUR SPECIFICATIONS ***

The program could find no data that matched the report specifications. Check the report specifications, correct, and re-enter.

K. Right Justification:

*** PLEASE RIGHT JUSTIFY YOUR ENTRY AND TRY AGAIN ***

This message is printed if a numeric field is not right justified. The message may appear for the following entries: model year, manufacturer code, release date, and Basic Engine Index.

Invalid data in data base:

*** I/O ERROR READING THE FUEL ECONOMY DATA FILE ***
THE ERROR OCCURED AT RECORD xxxxx
PLEASE NOTIFY EPA COMPUTER OPERATIONS

*** I/O ERROR READING THE TEST CAR LIST DATA FILE ***
THE ERROR OCCURED AT RECORD xxxxx
PLEASE NOTIFY EPA COMPUTER OPERATIONS

These messages indicate that an error exists in one of EPA's data files. If either one of these errors occur, please notify EPA Computer Operations personnel of the error message and describe the report specifications leading up to the error message.

M. Process Another Set of Reports prompt:

*** INVALID RESPONSE ***
YOU MUST ENTER A VALUE 'Y' OR 'N'.

I This message is printed if any character other than "Y" or "N"

is entered.

N. Report Destination prompt:

*** INVALID REPORT SPECIFICATION ***

YOU MUST ENTER VALUES '1' - '4' OR <CONTROL-C>

08:16:12

13

06/09/83

This message is printed if an out-of-range or alphabetic I character is entered.

6. PRINT ROUTING ON MTS:

- A. DEFAULT REMOTE PRINTER: For most manufacturers, the remote printer will default to the University of Michigan Computing Center's printer (CNTR), located on North Campus, Ann Arbor, Michigan.
- B. PRINT ROUTING CONTROL: There are three methods of assigning remote station printers:

- (1). Signon Command: When initially signing on to MTS, the user can specify the destination for printed output. The signon command would be the following:

```
$SIGNON xxxx PROUTE=yyyy
```

Where xxxx = Users MTS Account CCID
 yyyy = Remote Station Mnemonic Name
(See Section C for list of remote stations.)

NOTE: If the remote station is specified on the \$SIGNON command, all printed output will be directed to that station unless it is changed by the \$CONTROL or \$SET commands.

- (2). \$CONTROL Command: The MTS \$CONTROL command will route all reports to the specified remote station until the first \$RELEASE command is given. After the \$RELEASE command, the remote station will be the default (CNTR) or whatever was specified on the \$SIGNON or \$SET command. The following example will route the report to the printer at the University of Michigan Computing Center (North Campus):

```
$CONTROL *PRINT* PROUTE=CNTR  
$RELEASE *PRINT*
```

08:16:12
06/09/83

14

- (3). \$SET Command: The MTS \$SET command will reassign the remote station printer for the duration of the signon session (unless changed by another \$SET or \$CONTROL command). The form of the \$SET command is the following:

\$SET PROUTE=yyyy

(Where yyyy = remote station mnemonic name)

- C. REMOTE STATION PRINTER OPTIONS: The following remote station mnemonic names can be used in any of the MTS commands in Section B.

CNTR -University of Michigan Computing Center
NUBS -North University Building Station
UNYN -Michigan Union
DBRN -University of Michigan (Dearborn Campus)
FLNT -University of Michigan (Flint Campus)

- D. XEROX PRINTER OPTION: To produce the report on 8.5 X 11 paper, utilizing the University of Michigan's Xerox 9700 laser printer, select output destination "2" (temporary file -REPORT) while running the program. At the completion of the program (denoted by a program termination message) enter the following commands:

\$RUN *PAGEPR SCARDS=-REPORT
\$RELEASE *PRINT*

NOTE: The printed report will have to be picked up at the Computing Center.

- E. \$RELEASE *PRINT*: The MTS command \$RELEASE *PRINT* should not be given until the remote station destination has been determined. The \$RELEASE command releases the report to the specified (or default) remote station printer for printing. If the remote station was changed by the \$CONTROL command, the remote station will return to the previously assigned (or default) remote station for future printouts after release.

The \$RELEASE command has the following form:

\$RELEASE *PRINT*

NOTE: The program itself does not \$RELEASE *PRINT* if a report is printed using the remote printer option. It is therefore up to the user to release the report. However, if the user

08:16:12

15

06/09/83

neglects to release the report, the report will automatically be released when the user signs off.

F. CANCEL *PRINT*: Should you decide that you do not want to print the report, the following command will cancel printing if it is issued before print is released:

\$CANCEL *PRINT*

6. SAMPLE SESSION:

17

#SOURCE SAQM:1236C-MFRRPT

*** INTERACTIVE FUEL ECONOMY GUIDE AND TEST CAR LIST PROGRAM ***

ENTER A VALUE 1-4 TO SELECT THE REPORT YOU WANT.

1 --FUEL ECONOMY GUIDE WITH REPORT HEADERS

First a Fuel Economy Gas Milage

2 --TEST CAR LIST WITH REPORT HEADERS

report will be generated.

3 --FUEL ECONOMY GUIDE WITHOUT REPORT HEADERS

4 --TEST CAR LIST WITHOUT REPORT HEADERS

-

1

ENTER MODEL YEAR (LAST TWO DIGITS)

OR <CONTROL-C> TO CANCEL THE REQUEST

84

ENTER STATE CODE:

C --CALIFORNIA

F --49-STATE FEDERAL

OR <CONTROL-C> TO CANCEL THE REQUEST

F

SPECIFY UP TO TEN CAR LINE CLASS CODES:

00-19 --CAR LINE CLASS CODE

ALL --ALL CLASSES

LIST --TO PRINT AN EXPLANATION OF CLASS CODES

OR <CONTROL-C> TO CANCEL THE REQUEST

LIST

CAR LINE CLASS CODES:

01 --TWO SEATERS	10 --SMALL PICKUP TRUCKS/2WD
02 --MINICOMPACT CARS	11 --SMALL PICKUP TRUCKS/4WD
03 --SUBCOMPACT CARS	12 --STANDARD PICKUP TRUCKS/2WD
04 --COMPACT CARS	13 --STANDARD PICKUP TRUCKS/4WD
	14 --VANS, CARGO

05 --MID-SIZE CARS	15 --VANS, PASSENGER
06 --LARGE CARS	
07 --SMALL STATION WAGONS	17 --SPECIAL PURPOSE VEHICLES/2WD
08 --MID-SIZE STATION WAGONS	18 --SPECIAL PURPOSE VEHICLES/4WD
09 --LARGE STATION WAGONS	19 --SPECIAL PURPOSE VEHICLES/CAB
CHASSIS	

SPECIFY UP TO TEN CAR LINE CLASS CODES:

00-19 --CAR LINE CLASS CODE

ALL --ALL CLASSES

LIST --TO PRINT AN EXPLANATION OF CLASS CODES

OR <CONTROL-C> TO CANCEL THE REQUEST

ALL

18

SPECIFY THE MANUFACTURER TO BE REPORTED:

000 -999 --VEHICLE INFORMATION MANUFACTURER CODE

ALL --ALL MANUFACTURERS (THIS MAY BE EXPENSIVE)

OR <CONTROL-C> TO CANCEL THE REQUEST

ALL

SPECIFY THE CAR LINE NAME:

UP TO 28 CHARACTERS OF THE CAR LINE NAME

ALL --ALL CAR LINES

OR <CONTROL-C> TO CANCEL THE REQUEST

ALL

ENTER A VALUE 1-3 TO REPORT ALL MODELS

1 --WITH A BASIC ENGINE INDEX

2 --ON OR AFTER A SPECIFIED RELEASE DATE

3 --WITH THE SPECIFIED CAR LINE NAME

OR <CONTROL-C> TO CANCEL THE REQUEST

2

SPECIFY RELEASE DATE:

OR <CONTROL-C> TO CANCEL THE REQUEST

MM-DD-YY

01 01 84

YOUR REPORT SPECIFICATIONS ARE:

1. MODEL YEAR: 84
 2. STATE CODE: F
 3. CAR LINE CLASS CODES:
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
 4. MANUFACTURER CODE: ALL
- Example of changing the
5. CAR LINE NAME: ALL
- report specifications.
6. ALL MODELS ON OR AFTER RELEASE DATE 1-1-84

PLEASE CONFIRM THE REPORT SPECIFICATIONS BY ENTERING:

1-6 --ITEM NUMBER TO BE CORRECTED
<RETURN> IF ALL OPTIONS ARE CORRECT
<CONTROL-C> TO TERMINATE THIS SPECIFICATION

6

ENTER A VALUE 1-3 TO REPORT ALL MODELS

- 1 --WITH A BASIC ENGINE INDEX
- 2 --ON OR AFTER A SPECIFIED RELEASE DATE
- 3 --WITH THE SPECIFIED CAR LINE NAME

OR <CONTROL-C> TO CANCEL THE REQUEST

3

YOUR REPORT SPECIFICATIONS ARE:

1. MODEL YEAR: 84
2. STATE CODE: F
3. CAR LINE CLASS CODES:
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19
4. MANUFACTURER CODE: ALL
5. CAR LINE NAME: ALL
6. CAR LINE MODELS: ALL

PLEASE CONFIRM THE REPORT SPECIFICATIONS BY ENTERING:

1-6 --ITEM NUMBER TO BE CORRECTED
<RETURN> IF ALL OPTIONS ARE CORRECT
<CONTROL-C> TO TERMINATE THIS SPECIFICATION

<-----(<RETURN> was entered here.)

ENTER A VALUE 1-3 TO REPORT ALL MODELS
 1 --WITH A BASIC ENGINE INDEX
 2 --ON OR AFTER A SPECIFIED RELEASE DATE
 3 --WITH THE SPECIFIED CAR LINE NAME
 OR <CONTROL-C> TO CANCEL THE REQUEST

3

YOUR REPORT SPECIFICATIONS ARE

1. MODEL YEAR: 84
2. SALES CLASS: CV CT FV FT
3. MANUFACTURER CODE: ALL
4. CAR LINE NAME: ALL
5. CAR LINE MODELS: ALL

PLEASE CONFIRM THE REPORT SPECIFICATIONS BY ENTERING
 1-5 --ITEM NUMBER TO BE CORRECTED
 <RETURN> IF ALL OPTIONS ARE CORRECT
 <CONTROL-C> TO TERMINATE THIS SPECIFICATION

<------(<RETURN> was entered here.)

DO YOU WISH TO PROCESS ANOTHER SET OF REPORTS (Y/N)?
 N

ENTER UP TO FOUR VALUES TO INDICATE WHERE RESULT REPORTS ARE TO BE
 PRINTED: |

- 1 --WRITE THE REPORT ON THE TERMINAL
 - 2 --WRITE THE REPORT TO THE END OF TEMPORARY FILE FILE -REPORT.
 Send the report to a temporary file
 - 3 --WRITE THE REPORT TO THE END OF PERMANENT FILE 1236R-4REPT
 and to the remote printer.
 - 4 --WRITE THE REPORT ON THE REMOTE PRINTER
- OR <CONTROL-C> TO CANCEL PROCESSING

4 2

RESULTS HAVE BEEN WRITTEN TO:
 --TEMPORARY FILE -REPORT
 --REMOTE PRINTER

*** NORMAL PROGRAM TERMINATION

7. SAMPLE REPORTS

21

16:24:23 MAY 12, 1983
GUIDE

1984 49-STATE FUEL ECONOMY
NOTE: ASTERISK INDICATES AVAILABLE IN

PUERTO RICO ONLY.

TWO SEATERS

AVERAGE						MILES PER
MANUFACTURER		ANNUAL	GALLON			ENGINE
DESCRIPTION	TRANS-FUEL					
CAR LINE		FUEL COST	EST	COM	HWY	
CID/CYL (TYPE)	MISSION SYS					
ABLE MOTORS						
SPEED RACER	2000	\$ 1077	23	24	40	120
/ 4(FFS)	M5 2					

CARMELLOW

CARMETTE		\$ 1547	16	24	40	302(5.7L)
/ 8(FFS)	A4 2					

16:24:23 MAY 12, 1983
GUIDE

1984 49-STATE FUEL ECONOMY
NOTE: ASTERISK INDICATES AVAILABLE IN

PUERTO RICO ONLY.

SUBCOMPACT CARS

AVERAGE						
MANUFACTURER		ANNUAL	GALLON			ENGINE
DESCRIPTION	TRANS-FUEL	INTERIOR	SPACE			
CAR LINE		FUEL COST	EST	COM	HWY	
CID/CYL (TYPE)	MISSION SYS	PASSENGER/TRUNK	OR	CARGO(CU.FT.)		
AMCO						
TARANTULA		\$ 1455	17	24	40	131
5(FFS,TRBO)	M5 2	2DR-84/ 8	4DR-76/10	HBK-74/ 8		/
2931/COUPE		\$ 662	40	23	41	97
4(DIESEL)	M5 2	2DR-84/12	4DR-86/12			/
		\$ 592	38	24	40	97
						/

4 (DSL, TRBO)	M5	FI						
(TURBO)								
4 (DSL, TRBO)	A3	FI	\$ 662	34	24	41	97	/
4 (FFS)	M5	FI	\$ 799	31	25	40	105	/
4 (FFS)	A3	FI	\$ 1032	24	24	41	105	/
(DIESEL)								
5 (FFS)	M5	FI	\$ 1126	22	24	40	131	/
5 (FFS)	A3	FI	\$ 1238	20	25	41	131	/
BOLLARD								
*921S			\$ 990	25	24	40	108(1770CC)/	
4 (FFS)	M5	FI						
4 (FFS)	A3		\$ 916	27	25	41	108(1770CC)/	
			2					
921CSI			\$ 1302	19	25	40	196(3210CC)/	
6 (FFS)	M5		2					
6 (FFS)	A3		\$ 1376	18	24	41	196(3210CC)/	
			2					

16:25:27 MAY 12, 1983

V.I. REPORT
23
1984 FUEL ECONOMY

PROGRAM

FEDERAL TEST CAR LIST

--PASSENGER CARS

MFR CAR LINE NAME

CARB
DISP VENT COMP.
E.T.W. AXLE N/V
VEHICLE ID ~

RATIO HP CONTROL SYSTEM

TRNS-O/D LBS. RATIO RATIO

ATM										BASIC			
ENGINE DESCRIPTOR: (FFS)													
ATM		GHOST						*ST51-Z2		258	2	9.1	
112	EGR/PLS/3CL/	/	/CAN	M5-2	3250	2.35	24.2						
ATM		GHOST						*TT52-Z0		258	2	9.2	
112	EGR/PLS/3CL/	/	/CAN	M5-2	3250	2.35	24.2						
ATM		WOODROW						*ST51-Z2		258	2	9.1	
112	EGR/PLS/3CL/	/	/CAN	M5-2	3375	2.35	24.2						
ATM		WOODROW WAGON						*TT52-Z0		258	2	9.2	
112	EGR/PLS/3CL/	/	/CAN	M5-2	3500	2.35	24.2						
ATM		WOODROW WAGON						*ST51-Z2		258	2	9.1	
112	EGR/PLS/3CL/	/	/CAN	M5-2	3500	2.35	24.2						
ATM										BASIC ENGINE			
DESCRIPTOR: (CAL/FFS)													
ATM		ALLSPEED						PP44B-11				85	
FI 8.8	56 EGR/3CL/	/	/CAN	A3-2	2250	3.56	50.1						
ATM		ALLSPEED						PP44B-11				85	
FI 8.8	56 EGR/3CL/	/	/CAN	A3-2	2375	3.56	50.3						
ATM		ALLSPEED						STM40-OOB				85	
FI 8.8	56 EGR/3CL/	/	/CAN	M4-2	2250	3.29	45.3						
MILANO										BASIC			
ENGINE DESCRIPTOR: (FFS)													
MILANO		TURISTA						TT03		97	2	8.8	62
EGR/PMP/DXD/3CL/		/CAN	M4-2	2500	2.69	40.2							
MILANO		BULLETI						TT03		97	2	8.8	62
EGR/PMP/OXD/3CL/		/CAN	M4-2	2500	2.69	40.3							
MILANO										BASIC ENGINE			
DESCRIPTOR: (FFS)													
MILANO		CHARIOT						*TT03		97	2	8.8	62
EGR/PMP/OXD/3CL/		/CAN	M5-2	2500	2.57	38.4							
MILANO		BULLETI						TT03		97	2	8.8	62
EGR/PMP/OXD/3CL/		/CAN	M5-2	2500	2.57	38.5							
MILANO										BASIC ENGINE			
DESCRIPTOR: (FFS)													
MILANO		TURISTA						GS12		105	2	8.2	65
EGR/PMP/OXD/3CL/		/CAN	M4-2	2500	3.37	50.4							
MILANO		TURISTA						SGS12		105	2	8.2	65
EGR/PMP/OXD/3CL/		/CAN	M4-2	2500	3.37	50.4							
MILANO		BULLETI						GS12		105	2	8.2	65
65	EGR/PMP/OXD/3CL/	/CAN	M4-2	2500	3.37	50.5							

TESTS

REPORT

16:25:27 MAY 12, 1983

24

1984 FUEL ECONOMY

PROGRAM

FEDERAL TEST CAR LIST

--PASSENGER CARS

HIGHWAY EMISSIONS				ACT.		CITY EMISSIONS				
(GRAMS/MILE)				A/C DYNO		(GRAMS/MILE)				
CITY COMBINED						HIGHWAY				
MFR HC	VEHICLE CO	ID. CO2	NOX	SIM MPG	HP	HC MPG	CO	CO2	NOX	MPG
						.161	.990	390.	.780	31.0
.162	.970	500.	.802	29.3						
ATM										
ATM		*ST51-Z2		YES	10.0	.166	.961	424.	.781	29.0
.162	.278	202.	.322	36.0		26.0				
ATM		*TT52-ZO		YES	10.0	.158	.981	404.	.771	28.0
.159	.273	200.	.311	35.0		25.0				
ATM		*ST51-Z2		YES	10.7	.160	.971	424.	.761	30.0
.099	.303	201.	.321	36.0		25.0				
ATM		*TT52-ZO		YES	11.3	.158	.981	404.	.771	28.0
.159	.273	200.	.311	35.0		24.0				
ATM		*ST51-Z2		YES	11.3	.164	.983	414.	.761	28.1
.151	.263	201.	.312	35.4		25.5				
ATM										
ATM		PP44B-11		NO	6.7	.149	.979	410.	.780	28.2
.160	.280	201.	.320	35.03		34.3				
ATM		PP44B-11		NO	7.0	.160	.981	404.	.771	28.0
.159	.273	200.	.311	35.0		33.0				
ATM		*TM40-OOB		NO	6.5	.158	.899	406.	.800	28.1
.153	.279	202.	.320	35.1		42.1				
MILANO										
MILANO		TT03		NO	5.8	.160	.981	404.	.771	28.0
.159	.273	200.	311	35.0		40.0				
MILANO		TT03		NO	7.0	.157	.979	411.	.769	28.2
.150	.270	202.	.321	35.9		38.9				
MILANO										
MILANO		*TT03		NO	5.8	.160	.981	404.	.771	28.0
.159	.273	200.	.311	35.0		39.0				
MILANO		TT03		NO	7.0	.150	.897	400.	.709	27.9
.165	.266	211.	.298	34.8		36.7				

MILANO										
MILANO		GS12		NO	5.8	.160	.981	404.	.771	28.0
.159	.273	200.	.311	35.0		37.0				
MILANO		*GS12		NO	5.8	.151	.882	410.	.695	27.6
.166	.269	212.	.300	34.7		38.4				
MILANO		GS12		NO	7.0	.164	.988	408.	.784	29.3
.200	.299	215	.304	34.7		37.2				

ENCLOSURE III STORED AS CD8309_2.PCX